

OCCURRENCE OF DUTCH ELM DISEASE AND OTHER ELM WILTS IN LOUISIANA

by

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Abstract

During a roadside survey of 11 Parishes in northern Louisiana Dutch Elm Disease (DED) was detected in 13 trees sampled in seven parishes--Bossier, Caddo, East and West Carroll, Richland, Madison, and Webster. Samples from two trees in Richland and East Carroll parishes also yielded Cephalosporium sp. This is the first report of DED in Louisiana.

INTRODUCTION

The presence of Dutch elm disease in northern Louisiana, heretofore unreported, was suggested by the occurrence of the disease in northeastern Texas, all of Arkansas, and on the Vicksburg National Military Park in Mississippi (Davis et. al., 1970; Dooling and Peacher, 1964, Affeltranger et. al., 1976). Dutch elm disease in the Mississippi and Red River drainages in the northeastern and northwestern portions of the state was particularly suspected by earlier workers^{3/}. The purpose of this survey was to detect DED in wild and cultivated elms in northern Louisiana.

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RESULTS

Fourteen samples from American, slippery, and other elms were taken on ten state and parish roads in seven parishes: Bossier, Caddo, East Carroll, West Carroll, Richland, Madison, and Webster. In addition, Morehouse, Union, Claiborne, and Ouachita were surveyed, but no symptomatic trees were located.

Thirteen of the 14 specimens representing all seven parishes proved positive for Dutch elm disease (table 1). Additionally, two specimens also contained Cephalosporium sp. which may be the imperfect stage of Dothiorella sp., a fungus which also causes wilt of elms. This is the first report of DED in the State of Louisiana.

DISCUSSION

Although the cost of this disease has been enormous in the Northeast and Lake States, it is not expected to have a severe impact in Louisiana since elm is only a minor component of the native woodland and shade tree population in communities. However, where large elm shade trees are involved, loss to individual tree owners may be severe.

The remaining parishes north of I-20, parishes just south of I-20, and communities such as Shreveport should be surveyed next spring to further define the distribution of Dutch elm disease in Louisiana.

Table 1. Elm type, parish, specific location, and cultural result (Dutch elm disease, Cephalosporium, etc.) from a northern Louisiana survey (mid-June, 1983).

Elm Type	Parish	Specific Location	Result
Slippery	Madison	Tallulah-E. Levee Street	DED
*	Madison	Route 80--West of Quebec	DED
-	Richland	Two miles south of Epps -E. of Rt. 17	-
American	Richland	Route 17--1.5 mile north of Delhi	DED, Cephalosporium
-	W. Carroll	1 mile E. of Epps on 134	DED
American	W. Carroll	Poverty Point State Commemorative Area	DED
American	W. Carroll	West of Poverty Point on 577	DED
Winged	Webster	Hwy. 2 east of Shongaloo and Parish Rt. 220	DED
-	Bossier	Hwy. 157 east of Plain Dealing	DED
-	Bossier	Several hundred feet from other Bossier sample	DED
-	Caddo	Hwy. 2 - 1.5 mi. west of Red River	DED
Winged	Caddo	On Rt. 1 south of Vivian - south of Rt. 2	DED
-	E. Carroll	3 mi. east of Bayou Macon on 582	DED, Cephalosporium
American	E. Carroll	100 yd north of other E. Carroll sample	DED

* species uncertain

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